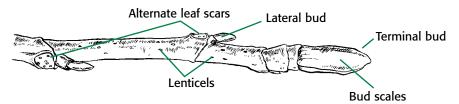
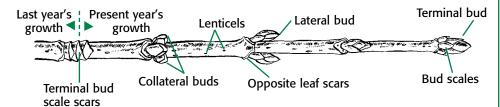


#### **Leaf Structure**

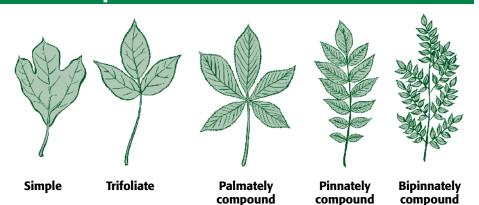
#### **Alternate arrangement**



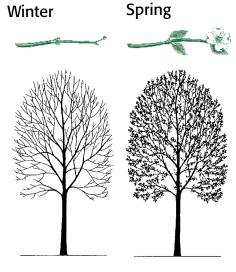
#### **Opposite arrangement**

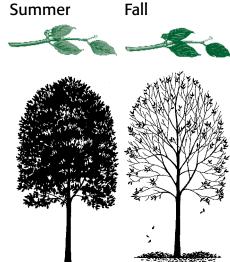


#### **Leaf Composition**

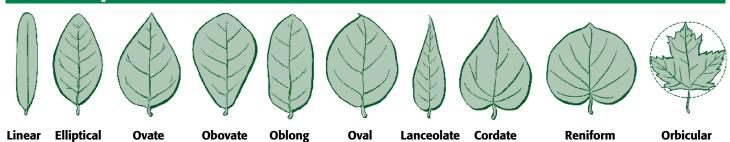


#### **Changing Seasons**



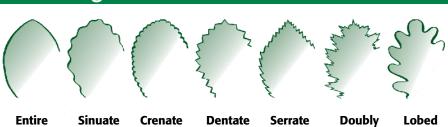


#### **Leaf Shapes**

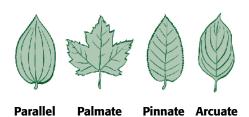


serrate

#### **Leaf Margins**



#### **Leaf Venation**

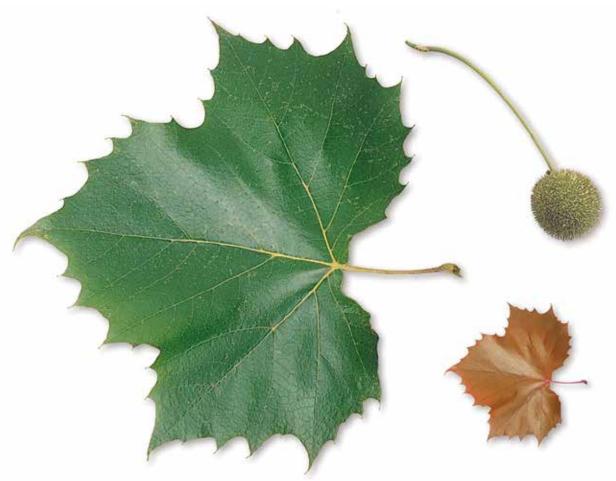


#### **Table of Contents**



# **American sycamore**

#### Platanus occidentalis



Sycamore is one of the largest eastern hardwoods. Sycamore can be used to stabilize streambanks along with other bottomland species, where it provides nest sites for large birds such as bald eagle and great blue heron.

**Height:** 90 ft, spread 90 ft

**Leaves:** alternate, simple, 4"-8" in diameter with 3-5 main lobes, edges coarsely toothed, yellow-green above, paler below

**Flowers:** tiny; greenish, in 1-2 ball-like drooping clusters **Fruit:** many seeded ball  $1''-1^1/2''$  in diameter on a stem 3''-6''

long; each seed attached to a hairy plume

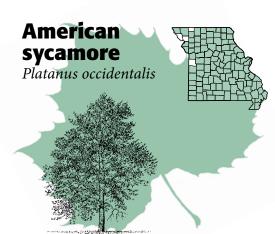
**Bark:** distinctive smooth whitish and mottled bark on upper trunk and branches; lower bark thin, dark brown, scaly

Ideal site: wet soil, intermediate sun

Value to man: erosion control, landscaping, wood products

Value to wildlife: cover, dens

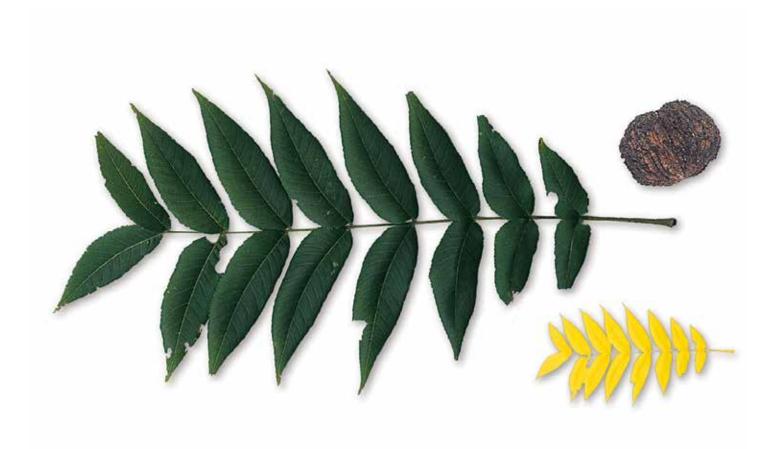
**Growth rate:** fast





#### **Black walnut**

# Juglans nigra



Black walnut is one of the most scarce and valuable native hardwoods. It is prized for its nuts and lumber. A chemical in the leaves and nuts will kill some plants such as tomatoes and apples.

**Height:** 85 ft, spread 85 ft

**Leaves:** alternate, compound, 12"-24" long with 13-23 leaflets; each leaflet 2"- 4" long, lance-shaped, edges finely toothed, yellow-green

**Flowers:** yellow-green catkins

**Fruit:** nut, 1"-11/2" in diameter, covered with a thick yellow-

green fibrous husk

Bark: young bark smooth and gray; older bark dark brown and

furrowed

Ideal site: moist soil, full sun Value to man: wood products, food Value to wildlife: food, cover, dens

**Growth rate:** medium





## **Eastern redbud**

### Cercis canadensis



Redbud is a small to medium understory tree found in nearly every county in Missouri. It is very showy in the spring when the leafless twigs are covered with masses of pink flowers.

**Height** 30 ft, spread 30 ft

**Leaves:** alternate, simple, heart-shaped, 3"-5" long, dark green **Flowers:** purplish-pink, pea-like, appear before the leaves in spring

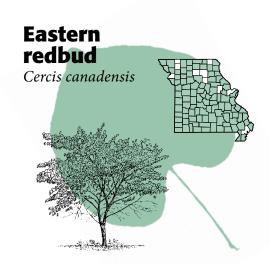
**Fruit:** flat pod, 3" long containing small seeds

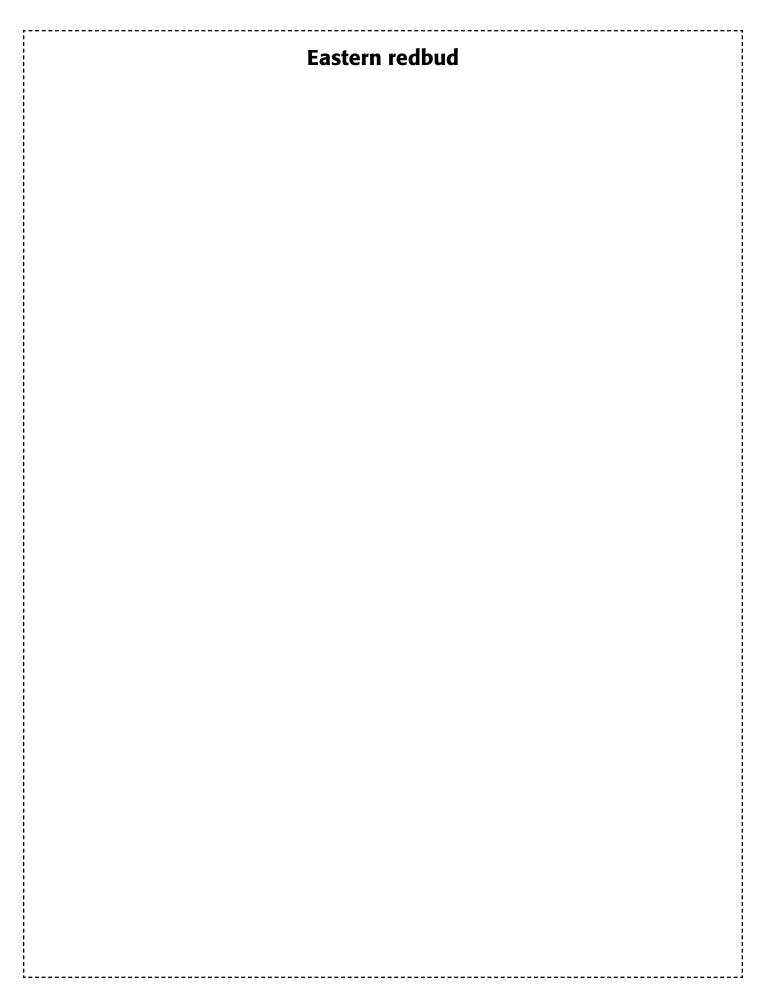
Bark: dark gray or brown with reddish inner bark showing

**Ideal site:** average soil, shade

Value to man: windbreaks, landscaping

Value to wildlife: food Growth rate: medium





#### **Eastern red cedar**

# Juniperus virginiana



A true juniper found on a variety of sites throughout Missouri. It can quickly colonize old fields and fence rows and it is also found on dry limestone glades where it forms nearly pure stands.

Height: 60 ft, spread 40 ft

**Leaves:** <sup>1</sup>/<sub>16</sub>" long, scale-like or needle-like, longer on new

growth; dark green

Fruit: small, round, fleshy, bluish berry-like cone

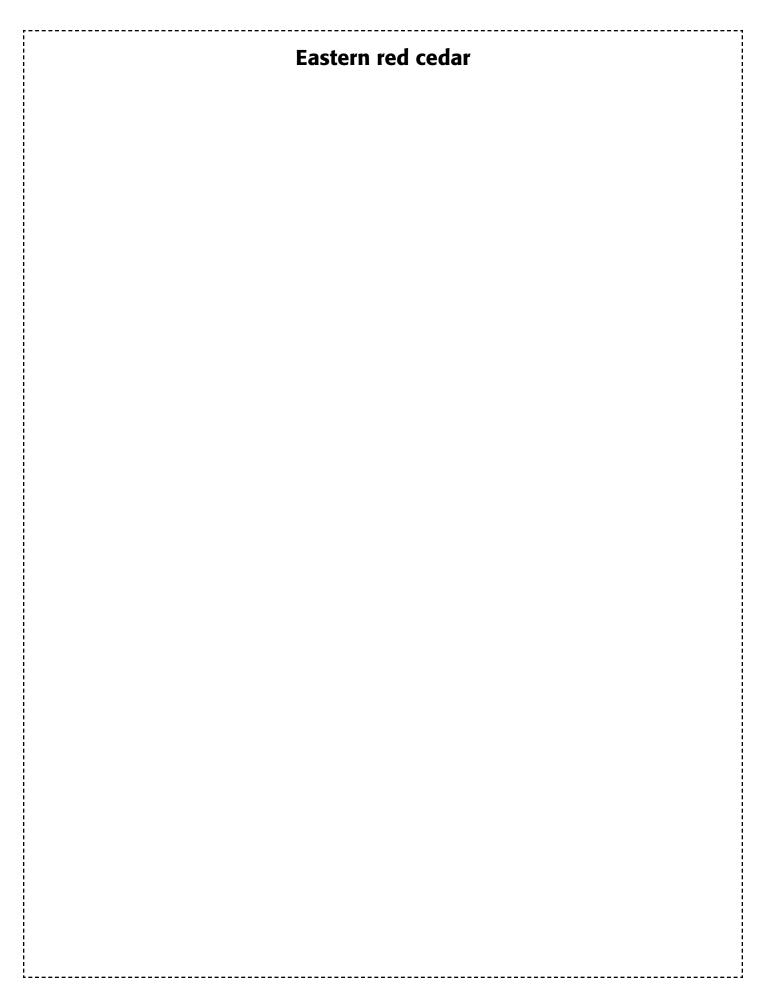
**Bark:** thin, light reddish-brown, shreddy **Ideal site:** wide soil range, full sun

**Value to man:** windbreaks, erosion control, wood products

Value to wildlife: food, cover

**Growth rate:** slow





# Flowering dogwood

# Cornus florida



A beautiful tree with showy early spring flowers, red berries and scarlet fall foliage. Dogwood should be planted where it is shaded. Flowering dogwood is Missouri's state tree.

**Height:** 40 ft, spread 35 ft

**Leaves:** opposite, simple, egg-shaped, 3"-5" long, edges slightly

wavy, dark green

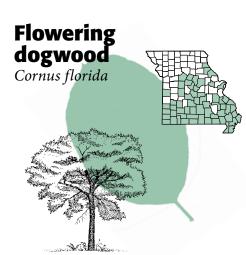
**Flowers:** small, surrounded by 4 large, white petal-like bracts;

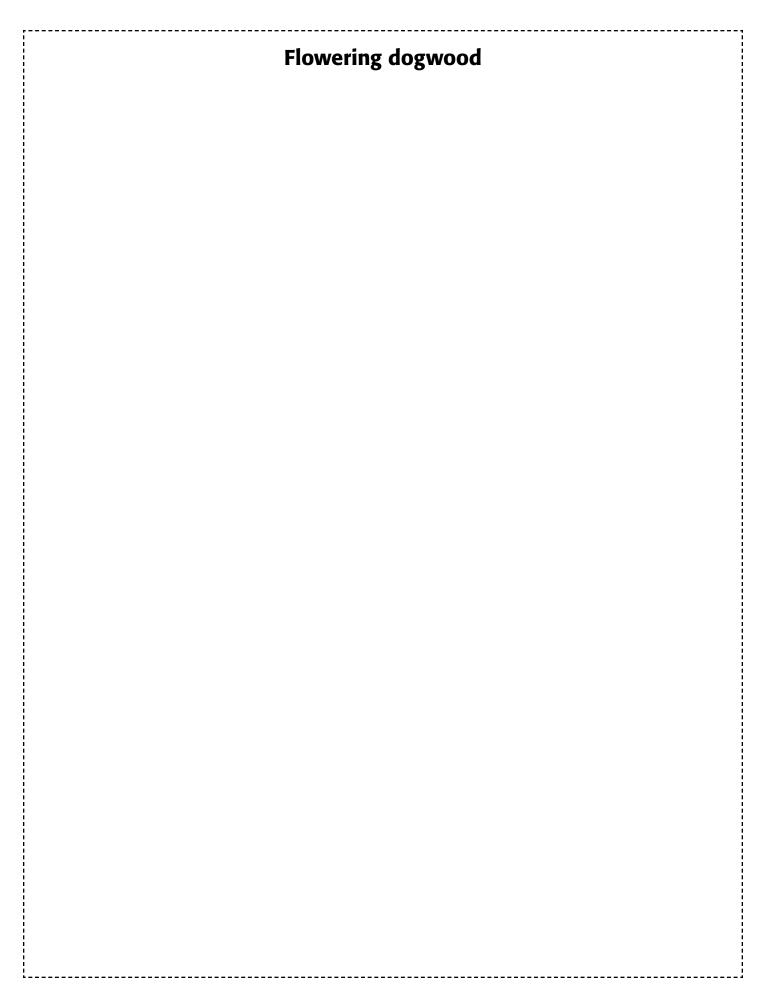
appear before the leaves in early spring **Fruit:** scarlet, egg-shaped berries, <sup>1</sup>/<sub>2</sub>" long

Bark: purplish-green on young twigs; older bark reddish-

brown, rough, broken into small square plates

Ideal site: moist soil, shade Value to man: landscaping Value to wildlife: food Growth rate: medium





#### **Northern red oak**

## Quercus rubra



Northern red oak is one of the most widespread and commercially important of the oaks. The tree is found throughout Missouri except in the southernmost counties of the Bootheel.

Height: 90 ft, spread 85 ft

**Leaves:** alternate, simple, 5"-8" long, oblong, 7-10 bristle-

tipped toothed lobes, shiny dark green

Flowers: male flowers in yellow-green catkins; female flowers

inconspicuous

**Fruit:** acorn, 1" long with a flat, saucer-like cap

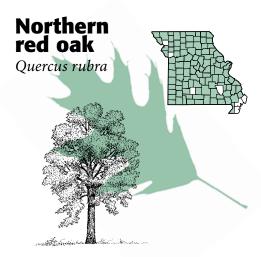
Bark: smooth, dark brown on young trees; becoming wide, flat ridges separated by shallow fissures; rough and furrowed on old trees

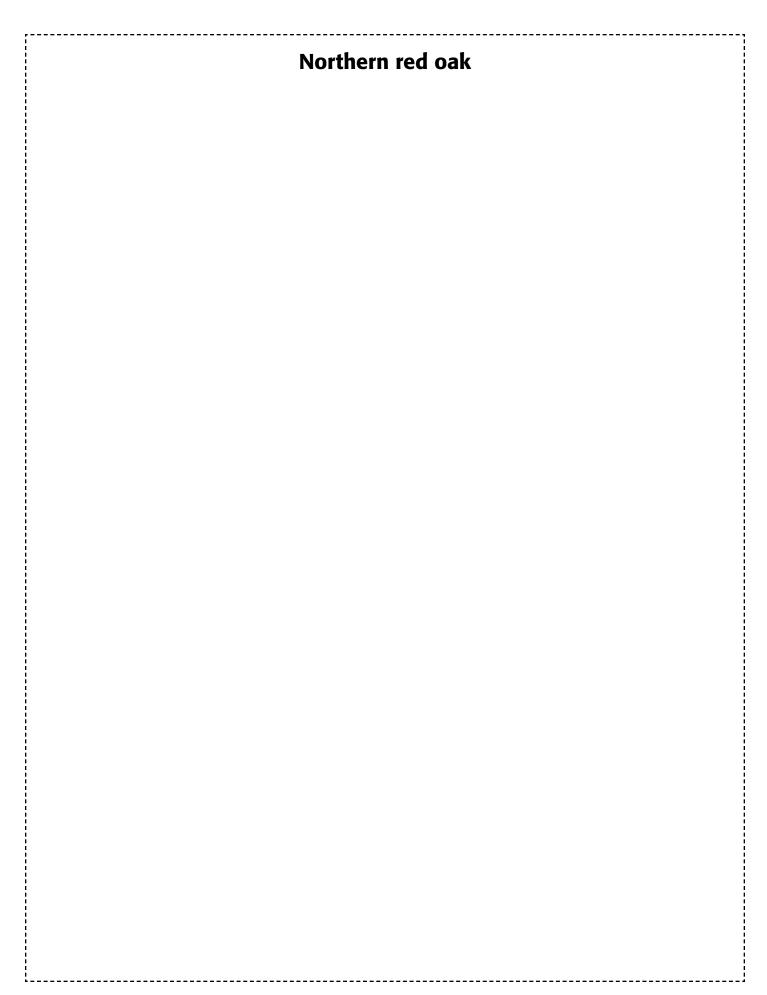
Ideal site: moist soil, intermediate sun

**Value to man:** windbreaks, landscaping, wood products

Value to wildlife: food, cover, dens

**Growth rate:** medium





### Pin oak

# Quercus palustris



Under natural conditions a medium-sized tree of moist valleys, along streams, ponds and swamps, but also found on dry locations. Pin oak grows faster than other oak species and has become a much planted ornamental.

Height: 65 ft, spread 65 ft

**Leaves:** alternate, simple, 3"-7" long, 5-7 bristle-tipped toothed

lobes, lobes deeply divided, shiny dark green

**Flowers:** male flowers in yellow-green catkins; female flowers inconspicuous

**Fruit:** acorn, ½" long with a thin cap

**Bark:** thin, smooth gray bark on young trees; older bark

shallowly fissured

Ideal site: wet soil, full sun

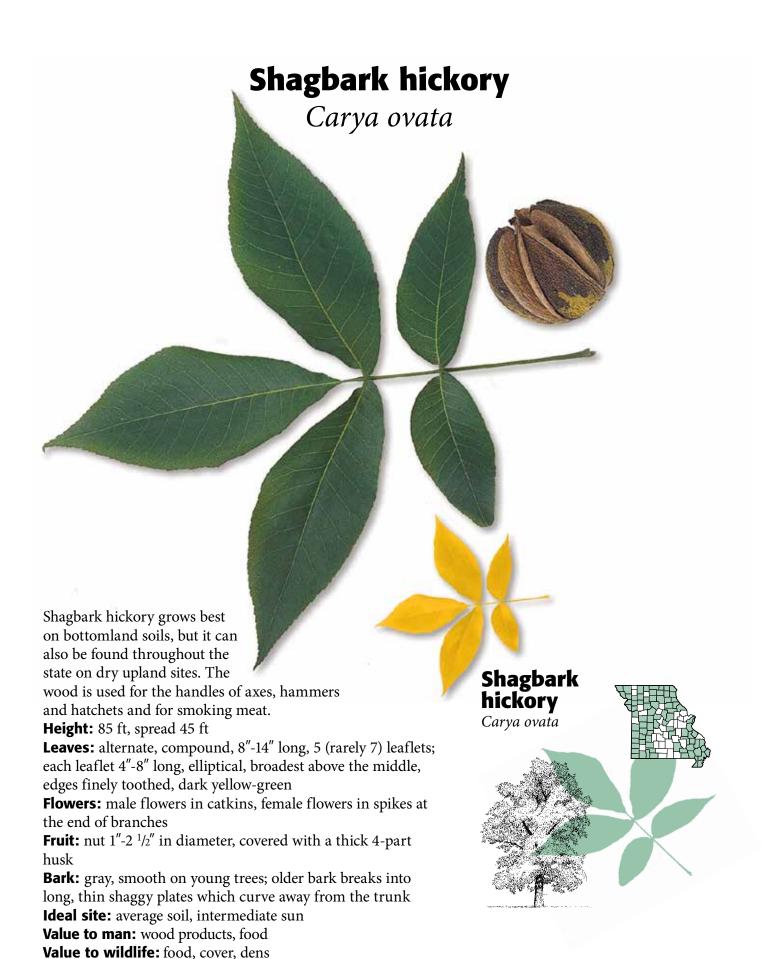
Value to man: windbreaks, landscaping, wood products

Value to wildlife: food, cover, dens

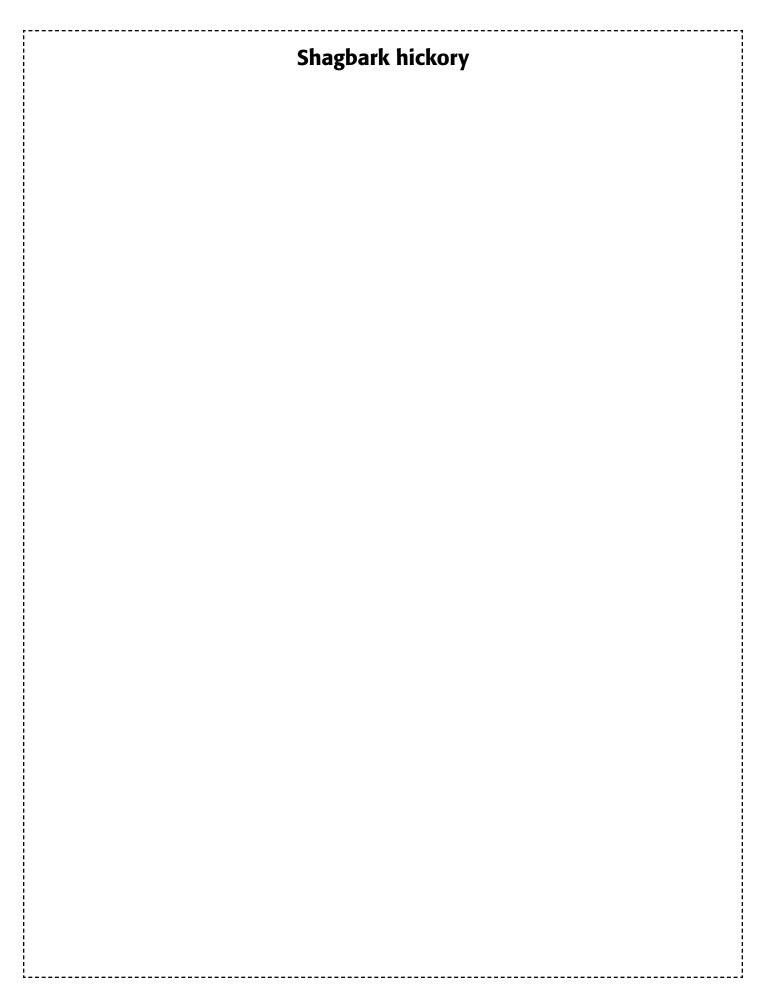
**Growth rate:** fast





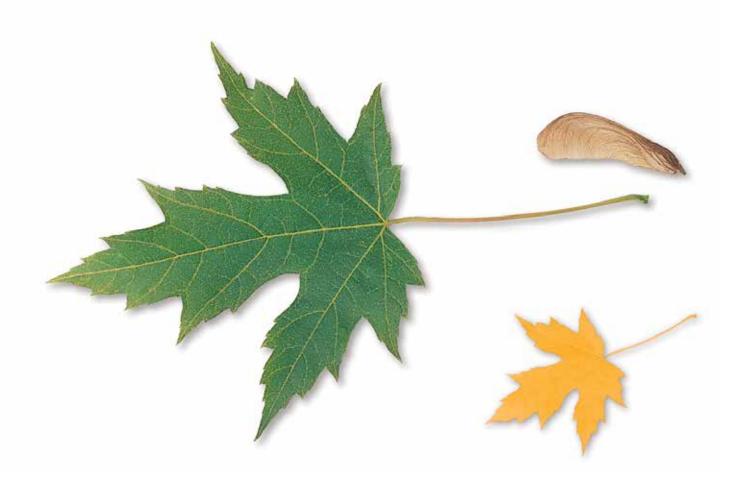


**Growth rate:** slow



# Silver maple

### Acer saccharinum



Silver maple is a large, fast-growing tree found in bottomlands. The wood is used commercially as a "soft" hardwood.

Height: 90 ft, spread 90 ft

**Leaves:** opposite, simple, 4"-6" in diameter, 5 lobes, edges

coarsely toothed, pale green above, silvery below **Flowers:** in clusters along twigs, reddish green

Fruit: winged seed in pairs

**Bark:** silvery-gray on young trees; older bark gray, breaking

into long thin scaly plates

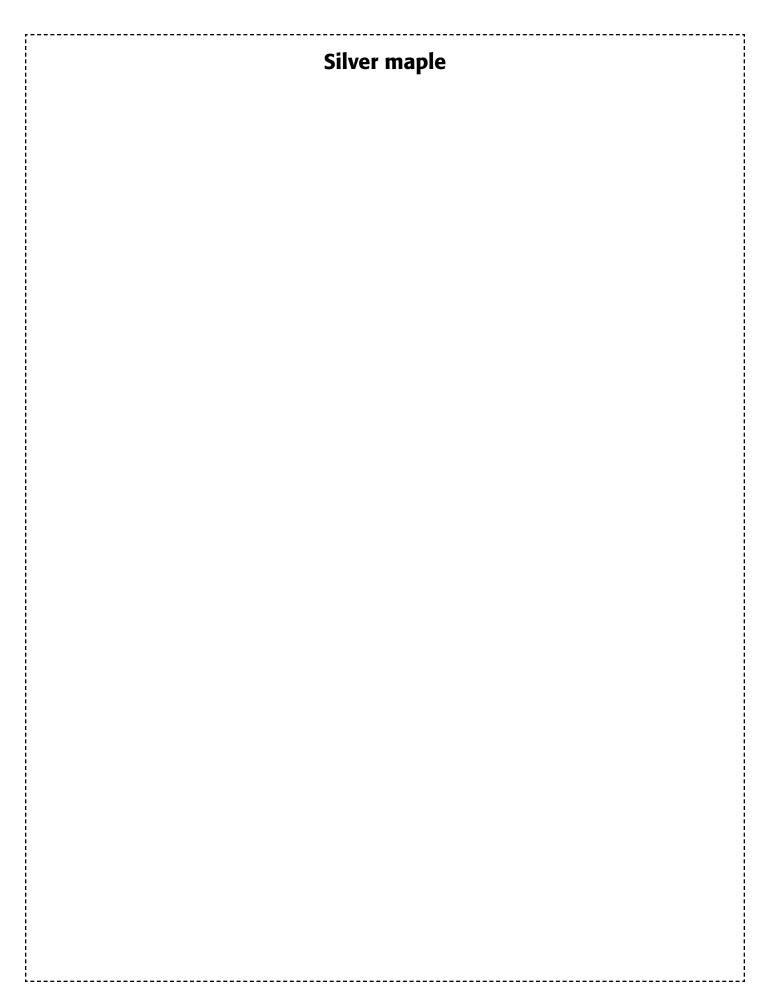
Ideal site: wet soil, intermediate sun

Value to man: erosion control, wood products

Value to wildlife: food, dens

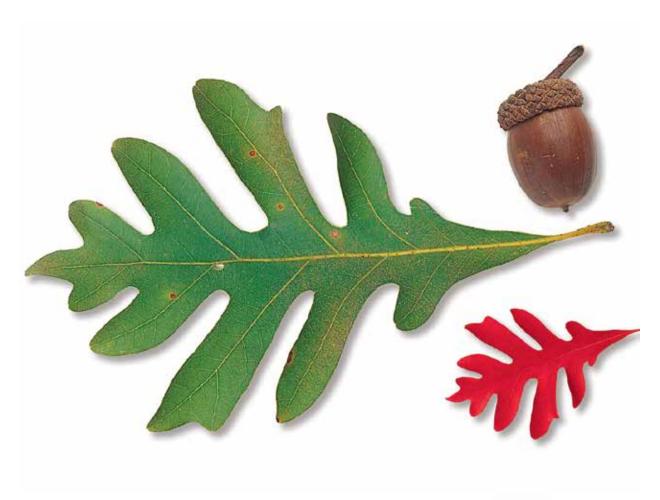
**Growth rate:** fast





#### White oak

## Quercus alba



The most important hardwood lumber tree in the United States and Missouri, setting the standard of lumber for all other oaks. The wood is outstanding for making tight barrels for whiskey and other liquids.

Height: 85 ft, spread 85 ft

**Leaves:** alternate, simple, 5"-9" long, 7-9 rounded lobes, edges

smooth, bright green

**Flowers:** male flowers in yellow-green catkins; female flowers in contributions

inconspicuous

**Fruit:** acorn, <sup>3</sup>/<sub>4</sub>" long, shiny brown with a thick warty cap **Bark:** light gray; rough with long loose scales; becoming

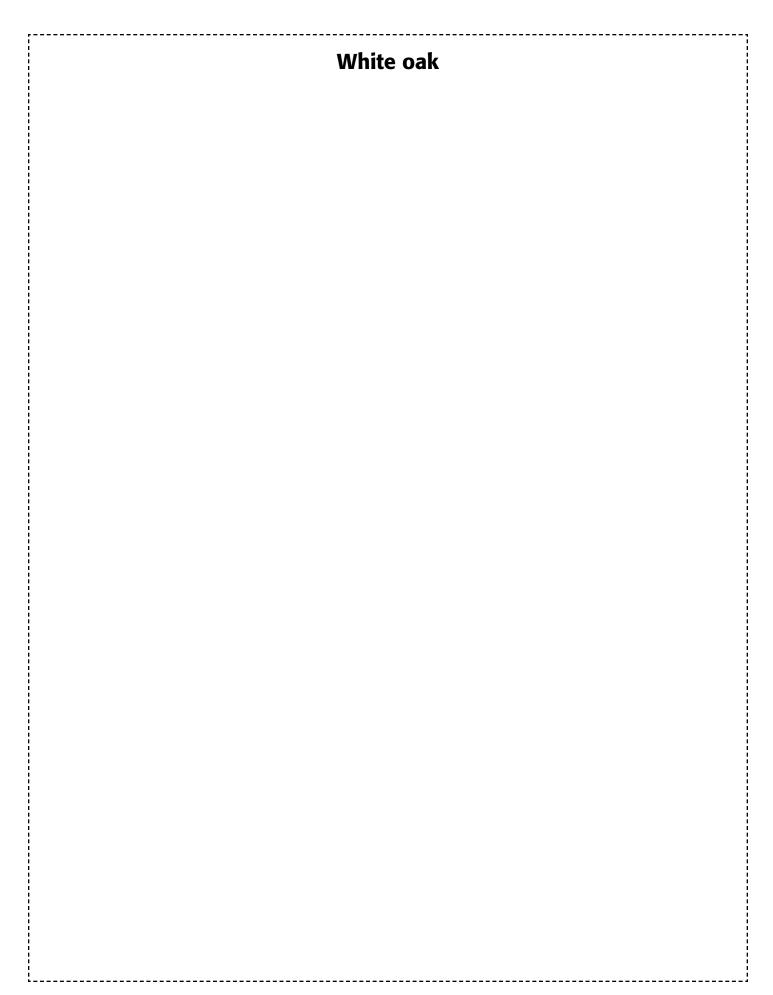
blocky on very old trees

**Ideal site:** moist soil, intermediate sun **Value to man:** landscaping, wood products

Value to wildlife: food, cover, dens

**Growth rate:** slow







F00018 09/2018